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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/347,683 07/02/99 KIELB

J R11.12-0662

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PM82/0719

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EXAMINER

SOTOMAYOR, J

ART UNIT	PAPER NUMBER
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3662

DATE MAILED:

07/19/00

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/347,683

Applicant(s)
John A. Kielb

Examiner
Sotomayor

Group Art Unit
3662



☐ Responsive to communication(s) filed on _____.

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-20 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☒ Claim(s) 19 and 20 is/are allowed.

☒ Claim(s) 1, 2, 5-12, and 14-18 is/are rejected.

☒ Claim(s) 3, 4, and 13 is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 2, 3

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

DETAILED ACTION

Information Disclosure Statement

1. The Information Disclosure Statement filed March 20th, 2000 has been entered and considered. An initialed copy of the PTO-1449 by the Examiner is attached.
2. The Information Disclosure Statement filed July 5th, 2000 has been entered and considered. An initialed copy of the PTO-1449 by the Examiner is attached.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 and 4-12 and 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jean et al ('791) in view of Schaefer ('006) and Kielb et al ('975).

Jean et al ('791) substantially disclose the claimed invention. Jean et al ('791) disclose a radar level gauge system including, inter alia, radar gauge circuit for receiving a transmit frequency and controlling radar transmission and level sampling, a clock source, a separation

sensing circuit and controller means for correcting the output. However it appears Jean et al ('791) do not appear to show first and second frequencies for transmission.

Schaefer ('006) or Kielb et al ('975) disclose that it is well known to provide two oscillators or clocks, respectively, for transmission of pulse signal trains at first and second frequencies as well as a frequency control circuit 407 and correcting the level output.

Kielb et al ('975) disclose that it is well known standard in the process control industry to use a 4-20mA process control loop

Thus one of ordinary skill in the art would have found it obvious at the time the invention was made to modify the radar system of Jean et al ('791) to incorporate the two oscillator or two clock technique as taught and as motivated by Schaefer ('006) or Kielb et al ('975), and use the 4-20mA control loop as taught and as motivated by Kielb et al ('975) to improve the overall performance of the radar system and to improve the accuracy of the level measurement. The remaining claims are either considered to be shown by the references or are considered to be well known prima facie obvious limitations in the art. For example, VCOs, A/D converters, timers, pulse samplers, etc.

Allowable Subject Matter

5. Claims 19 and 20 are allowed.

6. Claims 2, 3, and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited prior art shows various radar systems.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John B. Sotomayor** whose telephone number is (703) 306-4170. The examiner can normally be reached on Tuesdays to Fridays from 7:30AM to 5:00PM. The examiner is out of the office every Monday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Thomas H. Tarcza**, can be reached on (703) 306-4171. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-7687.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

jbs

JOHN B. SOTOMAYOR
PRIMARY EXAMINER